

## Claims

1. Solid state current distribution system for DC voltages based on an electronic solid state switch (13) for the current switching from an input circuit powered by a voltage source to an output circuit connected to a load, based on a first copper support (11) soldered to the case of the electronic switch and connected to the input circuit, based on a electronic board (14) for the control of the electronic solid state switch, based on a second copper support (12) to be connected to the output circuit, the electronic solid state switch terminals (18) are connected to the electronic printed circuit board (14) and the terminals (19) connected to the second copper support (12).

2. Solid state current distribution system for DC voltages as per claim 1 wherein the electronic solid state switch (13) is directly soldered to the copper support (11).

3. Solid state current distribution system for DC voltages as per claim 1 wherein the electronic solid state switch terminals (19) are soldered to the second copper support (12) by means of silver leads (20) U shaped.

4. Solid state current distribution system for DC voltages as per claim 1 wherein the printed circuit board (14) contains an electronic circuit with a first selectors for the range of admissible current limit and a second selector for a time delay to be used if loads have an inductive component, and a device to be used for a manual reset of the DSO system.

5. Solid state current distribution system for DC voltages as said in claim 1 with the printed circuit board (14) that contains a microcontroller and a memory programmed for the DSC system management and parameters recording .

6. Solid state current distribution system for DC voltages as said in claim 1 typical for its configuration as autonomous DSC module.

7. Solid state current distribution system for DC voltages as said in the claim 5 typical for the configuration as a module connectable in a parallel mode with one or more similar DSC modules to increase the current flow.

8. Solid state current distribution system for DC voltages as said in the claim 6 wherein the DSC module can be selected for a different range of currents.

9. Solid state current distribution system for DC voltages as said in claim 1 wherein the said printed circuit board (14) has a connector (19) soldered in for the interfacing with an external computer to control and monitor remotely the DSC system.

10. Solid state current distribution system for DC voltages as said in claim 1 with a thermal dispenser (15) associated with the solid state switch (13)

11. Solid state current distribution system for DC voltages as said in claim 1 wherein the

copper support of the input positive voltage (16) and the copper support (11) and (12) are well shaped and dimensioned as heat dispensers.

12. Solid state current distribution system for DC voltages as said in claim 1 to be used in electrical installations for naval or industrial applications.

13. Solid state current distribution system for DC voltages, as said in claim 1, described and claimed for the specified aims.

14. Solid state current distribution system for DC voltages as per claim 2 wherein the electronic solid state switch terminals (19) are soldered to the second copper support (12) by means of silver leads (20) U shaped.

15. Solid state current distribution system for DC voltages as per claim 2 wherein the printed circuit board (14) contains an electronic circuit with a first selectors for the range of admissible current limit and a second selector for a time delay to be used if loads have an inductive component, and a device to be used for a manual reset of the DSO system.

16. Solid state current distribution system for DC voltages as said in claim 2 with the printed circuit board (14) that contains a microcontroller and a memory programmed for the DSC system management and parameters recording .

17. Solid state current distribution system for DC voltages as said in claim 2 typical for its configuration as autonomous DSC module.

18. Solid state current distribution system for DC voltages as said in the claim 7 wherein the DSC module can be selected for a different range of currents.

19. Solid state current distribution system for DC voltages as said in claim 2 wherein the said printed circuit board (14) has a connector (19) soldered in for the interfacing with an external computer to control and monitor remotely the DSC system.

20. Solid state current distribution system for DC voltages as said in claim 2 with a thermal dispenser (15) associated with the solid state switch (13)